



The Dynamics of Environmental Criminology and Response from the Legal System of Pakistan

Dr. Bahadar Ali¹, Parveen Gul², Muhammad Humayun³, ^{1,2,3}Department of Law, University of Malakand, Dir Lower, Chakdara,
Email: ¹babakhail91@gmail.com, ²parveengul28@gmail.com,
³mhumayunadvocate@gmail.com

It has been recognized all over the world that regardless of its nature whether it is human being, animated or in-animated things need urgent protection from the destructive actions of human beings. We have a very beautiful world but it has been rendered ugly by forces we do not recognize it ugly are the real causes of the dilemma we face. The environment plays a crucial role in people's physical, mental and social well-being. Crime, criminality and criminology is generally associated with serial-killers and things of the same sort, however in reality things are very different. Criminology is much broad area than a crime only. It is a very complex social phenomenon. In the last few decades, world has witness a huge environmental disaster through environmental crimes which deeply connected with other types of crimes and is becoming one of the serious hazard for whole society in terms of its security and stability at every level. The focus point of environmental criminology is on various criminal patterns that have been put into practice in a built environment, and analysis the impact of this variable on the people's conduct and behavior.

Key Words: *Environmental Criminology, Green Criminology, Animated, In-animated world.*



INTRODUCTION

Normally, when we hear about the crime we generally associate it with TV discussion or documentary all people think of it as study of psychopaths, serial killers or murderers and things of characters like villain. However, criminology is a lot more broad than that of a crime. It is very complex social phenomenon. It is a social construct. Acts are considered criminal if it have been defined as crimes and that is the reason of constant changing of laws. An act which is not a crime might be labeled as a crime tomorrow. In very simple words, we can say that criminology is the making of law, the breaking or violating the law and the study that how members of our society react to that (Garland and Sparks 2000). The focus point of environmental criminology is on various criminal patterns that have been put into practice in a built environment and analysis of the impact of this variable on the people's conduct and behavior. It is basically the study of crime, criminality and also the victimization as they are interrelated and interdependent (Beirne and South 2013). In the first it looks into the places and in the second instance to the very acts that the organizations and individuals carry out and its inter-effect on the place by doing so these harmful activities.

PURPOSE AND METHODOLOGY OF THE STUDY

The focus point of the study is how we can bring about the balance and justice that deals with human beings, ecosystem, animals, and plants and wants to figure out how to combine environmental justice, ecological justice and species justice in the best way possible and that is part of ethical universe with in which the environmental criminology takes place. The study "The Dynamics of Environmental Criminology and Response from the Legal System of Pakistan" is basically a qualitative study attempted through an exploratory-cum-explanatory method of research for the purpose of thorough analysis of relationship between environment and the adverse effect of human actions on the natural resources and human, animated and in-animated world. For the purpose to conduct this study, secondary data in the form of books, articles, newspapers, civil society reports, journals and other government's annual publication collected and analyzed to explore and dive into the depth of the concept.

ENVIRONMENT AND HUMAN DIGNITY

Human dignity has virtually no meaning unless the environment is accorded with due dignity. Today we are being wiped by the elements as far as we can tell both by inside in terms of the cost we are paying by way of stress to our health and so on, through the endangered community in which we live, and in terms of how the weather and the climate that is treating us from the outside (Donald and Linehan 2019). Thus all the three levels i.e., at the individual level, at the community

level and at the species level, humanity is under threat. One of the reasons is to pin down the dominant narratives in this completely crooked broken world of ours. We have a very beautiful world but it has been rendered ugly by forces we do not recognize it ugly are the real causes of the dilemma we face. The environment plays a crucial role in people's physical, mental and social well-being. Despite significant improvements, major differences in environmental quality and human dignity remain and unsolved dilemma. The complex relationships between environmental factors and human health by taking into account multiple pathways and interactions should be seen in a broader spatial, socio-economic and cultural context as many things get lost in today's rhetoric of sustainability (Brownsword 2014). The degradation of environment through air pollution, noise, chemicals, poor quality of water and loss of natural areas combined with lifestyle changes may be contributory factors to substantial increases in rates of obesity, diabetes, diseases of cardiovascular, nervous systems and cancer — all of which are major public health problems on which our life is dependent and are the basics of a dignified life.

ENVIRONMENTAL CRIME

Environmental Crimes consist of every act which causes damage to the environment by way of exploitation, destruction of natural resources such as water resource, air, land, green-land, damage protected zones for the purpose of individual or group gains. Environmental crime is now considered as a public threat as it posed serious issue to human lives in general. These crimes are the emerging threats in terms of environmental protections, conservations and managements (Faure 2009). It can be further defined as any careless or deliberate act that reflects harm on environment contrary to the laws for the protection of environment. In the last few decade world has witness a huge environmental disaster through environmental crimes which deeply connected with other types of crimes and is becoming one of the serious hazard for the society in terms of its security and stability at every level (Burns, Gieringer et al. 2013).

Environmental crime is a collective word which describes a range of activities having negative impact on the environment and gives monetary advantages to the organizations and individuals rendering the natural resources damaged. Among other environmental crimes the most recognized crimes are;

- The Pollution;
- Illegal wild life trade;
- Illicit trading of the hazardous waste;
- Illegal or unregulated fishing;
- Illegal logging; and
- Illegal trading of timber.

Environmental crimes have gained the characteristics of real or conventional crimes in a very recent time (Drumbl 1998). However, the changing magnitude from national to transnational nature of these crimes has forced the governments to take preventive actions. International crimes' network have not acquired the characteristics of organized crime group. Here, it is very necessary to discuss the three important types of environmental crimes;

- Crime against the Wildlife: Crimes against forests and wildlife are the most serious crimes usually committed almost all over the world. About Seven to Eight billion dollars trade of illegal trafficking of wildlife takes place annually. Here, trades in wild life species are the focus point in trade whether living, dead or even in parts such as rhino horn, tiger skin, elephant part etc., (Schmidt 2004). The rise in demands from the booming economy even for the traditional medical purposes has added it rather attractive for the environmental criminals to engage in such crimes against wildlife. It also covers the illegal trafficking of living animals and birds.
- Crime against Natural Resources: This type of environmental crimes cover all the resources made by the nature such as water, land and air resources. The responsible factors against the natural resources are the growing industrializations, motorizations and urbanizations. Fossil fuel pollutes air, land and water, and the release of illegal effluents from the industries and domestic sewages, fertilizers running off from the farming system, e-waste and municipal solid waste disposed of etc. The consequences of pollution is non-other but resulting in acute and chronic diseases to the human beings and other like forms. It adversely affects the natural ecosystem, poses a serious threat to endangered species creating poor quality and very hazardous living conditions. Study suggests that more than Ninety Five percent populations in the developing states are living in dangerous conditions of life (Adler and Lord 1990).
- Crimes Relating to Hazardous Substance: It is basically the bi-products of industries or factories. As proper treatment of these toxic substances are costly, technical and difficult, thus the company either hands over it to other agencies for secret dumping in any illegal or un-authorized place or simply disposed it off illegally. It covers the acts of discharging, dumping or disposing hazardous waste materials at public places, natural habitats, unlawful transportations/smuggling such as hazardous waste and storing the waste in such a way that results in a threat to general public (Hansen 1990). These illegal hazardous dump-sites are not less than environmental time-bombs as it results in contamination in various forms such as contamination of potable water, land, soil and permanently impairing the very ecosystem.



GREEN CRIMINOLOGY

Green criminology is defined as the examination of those actions which renders adverse effect on environment, humanity and against animated and in-animated world regardless of the fact whether it is corporate body or individuals. It includes a lot of factors such as unlawful trade in wildlife, corporate crimes and other serious threat to human life. It is basically everything which comes under the ambit of environmental crime, human, eco-systems and animals (Beirne and South 2013). Now here it might be confusing that normally something harmful for the environment, animals or humans are not considered criminal. This is where environmental crime and environmental harms come into play. For someone to hold liable for environmental criminal act, the prosecutor will have to proof beyond reasonable doubt that the defendant knowingly, negligently or recklessly committed the wrongful act. The defendant must be aware of the nature of his act that he is committing an act which is wrongful as it is the intention or the mens rea the guilty mind playing a key role of rendering him liable not his outer conduct (White and Heckenberg 2014). A person cannot be guilty of committing a criminal act unless he knows the nature of the act being criminal or negligent. Some of the environmental crimes are listed below;

- An improper collection, transportation, recovery or disposing the waste material;
- Unlawful operation of plants in which dangerous activities are carried-out where dangerous substances being stored;
- Destroying, killing, possessing or trading protected plants species or wild animals; and
- Exporting, importing or production, marketing or carrying out an activity which causes Ozone depletion.

Traditional criminology is concerned only with what is being criminal; green criminology is concerned with environmental harm. Environmental harm can be described as any act done or step taken which harms the ecosystem which is not necessarily be considered as crime for instance deforestation, pollution which indirectly have an adverse effect on our lives is sometimes not considered as crime (White and Heckenberg 2014). The point which marks differentiation between these two is the causation of the context of causing the crime. For example I have tons of toxic waste and I dump them by a road-side or any other place that might be defined as criminal act however, when government dumps that poisonous waste that is not same all the times. The sole reason that why these actions are not termed crimes due to the fact that the perpetrators of such crimes are often the state itself.



GREEN CRIMINOLOGY AS A SOCIAL ISSUE

The identification of environmental harm as a social issue is very important. Environmental racism is a huge issue. Race is still considered as a leading factor regarding disproportionate exposure of ecological harm of various communities. It can be simplified in a way that race envisages where the individuals reside which community's lands is to be used for dumping and which are to be spared. There are a large number of cases which suggests especially in the developed countries where the minority community is often used as a sacrificing zone. It shows that the governments and big corporations are using marginal community as dumping ground for their poisonous waste material. There are many documentary proofs showing that the same thing occurred in the developing countries particularly in Canada, USA and Croatia where minority communities are continuously exposed to pollutants and toxic waste materials (Halsey 2004).

The whole exercise of green criminology and looking to environmental harm is a personal exercise for every individual who is involved. The reason is that because this is our planet; this is the planet where we live, our children live, our grandchildren live, shared with all sort of animals, mountains and rivers. We must protect and cherish the things we love; which includes human related, animated and even non-animated objects. The importance green criminology can be judged from the fact that here we play dual role both as public advocates on behalf of nature, on behalf of the environment and trying to stop and protect the earth from the environmental harm but also we are trying to train a whole new generation of people to think differently about the planet. We must talk about eco-justice, we must talk about eco-centric perspective on our relationship with nature. If we know climate change is happening and if we know that it is caused by human then the question is why it is still happening because we have knowledge of its consequences. Here the criminology play its role and the concepts like ecology that we are destroying the planet, carbon criminals which we can actually pinpoint the specific individual, the specific industries who are destroying the planet in a sustained systematic way (South 2014).

Green criminology focuses on environmental harms including climate change. It covers plastic waste, water theft which connected with artificial drought automatically connected with climate change. Thus green criminology works on the connection of what happens to the natural environment and what we as society can do to intervene, to medicate and to adopt those changes.

INTERNATIONAL LAW AND ENVIRONMENTAL CRIMES

International law provides all over the world a common platform to come together and to frame standardized rules for the conservation and protection of our natural environment. The major development in this regard is Stockholm Conference 1972; the first ever inter-governmental



thoroughly international conference on environmental protection which aims to cover environmental issues across the world (Smith 2012). The conference helped in creating international environmental awareness regarding hazardous ecosystem and prompted the countries to enact laws for environmental protection along with its elements. On the other hand, Rio Declaration 1992 opened the door for domestic legal framework insuring economic growth and environmental protection on the touchstone of sustainable development (Prakasa 2021).

ENVIRONMENTAL CRIMINOLOGY AND DECISION MAKING

Environmental criminology has focused on the role that opportunities play in criminal decision making. Simply stating that if there are lots of easy opportunities available to commit crime and are low risks of arrest of the criminals, then we expect that there shall be more crimes. Crime should be prevented by making the opportunities more difficult to carry out and to increase the risk of getting caught. If we are able to do this, then we expect that there will be less crimes in our society. There are a number of major patterns through which we are trying to understand criminal opportunities; “the where and the when of crime”. It has been observed that crime tends to cluster different places and different times of the day. For instance at night areas with lots of night clubs tends to host more crimes than other areas and the pattern is completely different pattern during the day. This sort of insight tells about something the role of land use and predicted population play in producing criminal opportunities (Mistura 2018).

The second pattern looks into “the how of crime”; we are interested in the tools, the resources and the information that offenders need to successfully conduct the crime. No matter how spontaneous the crime appears, every crime has some opportunistic components and by understanding this we can try to shape the risks for crime. These patterns “the where, the when and the how” of crime tell us some of the role that the opportunities play and the goal is to look at how we can design the immediate environment that restricts easy and low risk opportunities to commit crime. This concept of environmental criminology got attention of the people in 1980s which put focus on criminal studies on environmental or contextual factor that can influence criminal activities (Korneev, Pichugin et al. 2021). These factors include the space, geography, time and targeted victims and are the necessary conditions for committing environmental crime. The environmental criminologists take keen interest in time and place where the alleged criminal act has been committed, they take interest in use of land, the pattern of traffic and streets designs where offenders move out and the routine activities are carried out. Sometimes they also take help from maps which shows the street designs and geographic profiling of a particular area strengthen the theory that criminal often takes advantage of geographic factor while committing a crime and where to commit such crime.

With the growing rate of urbanization around the globe, crime and its fear is one vital factor people often consider in choosing where to live. Empirically, safety is of high quality feature for sustainable built environment. On one hand, it is argued that considering urban planning theories alone in design and assessment of built environment has failed to critically analyze the environmental factors that aid crime and its fear in communities. Hypothetically, only 1 out of 10 planners knew about the key indicators of crime generators and attractors from the view point of urban design and planning (Cho 2000). On the other hand, environmental criminologist have identified that street characteristics, population density, and mixed land use development are among key indicators associated with high crime rates as opportunity of crimes naturally operationalized in those areas and these indicators could not be abolished just to curtail crime. In fact, it is impossible!

However, one would ask what preventive measures could be taken to reduce the crime and criminality in communities? Here two key elements would be itemize:

- To study the theoretical frameworks of place-based criminology and apply the thoughts into urban design and planning. Some of these theories that planners need to critically understand includes the social disorganization theory, opportunity theories (normal activities, balanced choices and crime pattern/environmental criminology concepts) such as (CPTED) and situational crime prevention. Integrating the knowledge of crime pattern theories in land use planning is very crucial towards building a sustainable safer environment (Jeffery 1977).
- To carryout crime risk assessment prior to any spatial development. Carrying out a risk assessment is an important task for any project and crime should not be left out. Planners should be made conversant with police crime diaries where officially recorded crimes are stored, or conversant with victimization surveys where crime diaries are unavailable (Cozens, Saville et al. 2005). Once crime data is available plus socio-demographics (of course very known to planners), crime patterns could be traced, and with the knowledge of place based criminology, planners would be able to develop possible crime preventive measures and integrate them into urban design patterns alongside the sociology of people living in an area. This will not only help in building a sustainable environment but will reduce unnecessary police tactical operations in our cities.

SYMPATHY OF OUR LEGAL SYSTEM TOWARDS ENVIRONMENTAL CRIMINOLOGY

Every law derives its validity from the constitution. Being a grand norm of states, constitution provides basic structure for the government machinery to function. Unfortunately, there is no mentioning of the word “Environment” in all the 280 Articles of the Constitution of Pakistan 1973.



At the time of independence environmental protection was not on the priority list of Pakistan, the consequences of which we are facing to date. In Pakistan environmental protection movement gained momentum when delegates from Pakistan participated in the Stockholm conference in 1972 (Nadeem and Hameed 2008). Pakistan started work on environmental enactment in 1983 Pakistan Environmental Protection Ordinance which was replaced by Pakistan Environmental Protection Act 1997. After the 18th Amendment the subject of environmental protection has been given in the hands of provinces respectively. Along with its own merits and demerits, every province has its own environmental protection mechanism dealing with environmental violations. For every environmental component, we have enacted separate laws from forest to fisheries there are separate enactments (Hyder, Ghaffar et al. 2006). Similarly, there are criminal as well as civil laws indirectly dealing with environmental protection. Such as there are provisions in Pakistan Penal Code, Criminal Procedure Code, Law of Torts and Civil Procedure Code which indirectly protect the environmental harm. But when it comes to relevant human activities that indirectly endanger the environment, human, animal and inanimate world our laws provide very little support.

After careful analysis of the prevailing environmental situation in Pakistan, it can be easily deduced that like other developing countries of the world environmental crime has emerged in Pakistan in a very organized way. These crimes are sundry, witnessed burning forests in Islamabad; the only green area that we are having at the moment, responsible for twenty percent of rain in Pakistan is no doubt a predominant feature. Un-authorized dumping, littering, timber mafia, sewage from hotels to the rivers and tire burnings in the brick kiln are the examples of routine acts in Pakistan (Ehtasham, Sherani et al. 2022). These myopic, greedy and enemies of natural environment must need to be a deserving end as their crimes knew no boundaries. They are driven by sick and malicious mind leaving a long-lasting adverse effect not only on the humanity itself but also on animal as well as inanimate world. Along with the real perpetrators those people who abetted or instigated in such criminal acts must also be dealt on the same footing. The Criminal, Civil and Environmental Tribunal will have to step forward for saving the environment and our mother earth. Studies suggest that unlawful extraction and trading timber, minerals, land clearing, trafficking waste materials; if on one hand it comes under the ambit of environmental crimes; on the other hand it amounts to fraud as well. The research further confirms the fact that crimes committed against the environment are on the top of the list in terms of most profitable as money generated from unlawful loggings, mining, waste trafficking, wildlife trading and timber mafias hold high financial flow (Sohail, Delin et al. 2014).

The Use of FATF for Environmental Protection

Though there are specialized laws and regulations which deal with normal or traditional offences in Pakistan and enforced by the concerned laws enforcement machinery. As Pakistan became



member of APG, it is now working to handle environmental crimes with the help of FATF and APF, but it is also an admitted fact that no significant achievement has been made so far. The major drawback can be seen in the definition of environmental crime in itself. In Pakistan it is treated as a predicate offence but we failed to mark difference between unlawful trade of wildlife and an environmental crime (Saeed, Sattar et al. 2012). By close analysis of the definition along with explanations of every activity that ultimately ends as environmental crime in the context of our prevailing legal framework and refer to unlawful logging, unlawful land clearings, crimes against forest, trafficking waste and illegal mining activities, it becomes crystal clear that our system is completely silent on the matter. In this regard, the forest in Khyber Pakhtunkhwa is on the hit list faced with unprecedentedly timber and wildlife trafficking and it increases on daily basis (Aziz 2005). However, the concerned authority has adopted no strategies regarding stopping of these illegal acts. Here it must be mentioned that since these areas are even identified by FATF which means now the responsibility on the shoulder of our concerned authorities to handle this crime have doubled.

It is the essence of the times to be cognizant that environmental crimes has emerged in rather very organized form which needed to be dealt by the authorities on priority bases regardless of territorial restrictions. Indeed Pakistan must shape laws under the guidance of FATF for the purpose to combat unlawful enrichment coming out from environmental crimes (Ameleshin and Pryakhin 2021). There is a dire need for adopting risks based approach and introducing laws which helps the relevant authorities in identification, detection and mitigation of potential risk of such crimes. The laws, its implementation process and possible outcomes need to be drafted very carefully with due consideration keeping the direct and indirect impacts on community in mind and to provide opportunity for the promotion of alternative options.

Pakistan can seek input from other non-traditional stakeholders as well. For instance environmental protection agencies, authorities dealing with forest department, water resources, mining concessions and other private sectors engaging them under detail guidelines for them to be aware of any risk, controlling measures and immediate reporting (Mukhtar 2018). Taking financial intelligence unit on board is another useful way which will be very helpful in investigating or tracing the environmental criminals. Here it is worthy to be noticed that Pakistan is still lacking experienced workforce in law enforcement department as per the report of APG in 2019 (Hussain 2019). According to the FATF report huge sum of money in Pakistan is generated through land clearance, logging, unlawful animal trading, and waste trafficking and boosts its convergences with other crimes (Sultan, Mohamed et al. 2021).



CONCLUSION

Urban pollution is really prevalent in our cities, that how can we improve our air for the coming generations and similarly when it comes to the provision of water, how we can provide clean water to the public at large. We need to address the problem through legislative and implementing measures. The role of the federal government in this matter after eighteenth amendment is limited as the federal government can make an umbrella policy. It can promote only but implementation and especially ground funding has to come from the provinces. In “Nestle 2005 CLC 424 + PLD 1997 Karachi Page 11” Justice Jamali held that natural resources are public trusts and do not exploit or consume these public trusts because they belong to the future generation (Nestle, 2005). The implementation of NEQS needs political will and there is no political will to push to enforce them, secondly civil society also needs to be engaged in this for good environmental governance.

The issue is that our environmental protection agencies which are legally mandated to monitor air quality and to ensure the implementation of quality standards do not have the relevant air quality testing to tell us how bad the air quality is. We disparity needs monitors to inform the citizen in the environmental protection agency to know that how bad the air quality is or what the composition of air pollution is before the policy actions can be taken. People can pollute on the street as matter of fact the EPA does not have enough equipment to measure their emissions, thus environmental criminals get away with it, because the department responsible for monitoring and enforcement does not have the budget to buy these machines. There is no political emphasis which looks into the matter, it is a crucially important issue as air pollution disproportionately causes harm to senior citizens, pregnant women and children.

One of the major hurdles in preventing environmental crimes is the failure on part of the government in taking prompt preventive measures. In-equip enforcement agencies and not giving priority to such instances has added fuel to the fire.

Judiciary can play the most important role in enhancing environmental quality and a balanced system between products and supply chain. In order to achieve the high standards, judges of apex as well as higher judiciary must take into consideration of the report of FATF, money generated form crimes against environment and in case proceedings special attention should be given to unlawful land acquisition and its exploitation as factors of environmental crimes.



References

- Adler, R. W. and C. Lord (1990). "Environmental crimes: Raising the stakes." *Geo. Wash. L. Rev.* 59: 781.
- Ameleshin, K. and G. Pryakhin (2021). Threats of banks participation in the criminal proceeds legalization in the field of environmental protection. *E3S Web of Conferences, EDP Sciences.*
- Aziz, J. (2005). "Management of source and drinking-water quality in Pakistan." *EMHJ-Eastern Mediterranean Health Journal*, 11 (5-6), 1087-1098, 2005.
- Beirne, P. and N. South (2013). *Issues in green criminology*, Routledge.
- Brownsword, R. (2014). *Human dignity, human rights, and simply trying to do the right thing. Understanding human dignity*, British Academy.
- Burns, A., et al. (2013). "Environmental crimes." *Am. Crim. L. Rev.* 50: 857.
- Cho, B.-S. (2000). "Emergence of an international environmental criminal law." *UCLA J. Envtl. L. & Pol'y* 19: 11.
- Cozens, P. M., et al. (2005). "Crime prevention through environmental design (CPTED): a review and modern bibliography." *Property management.*
- Donald, B. B. and E. P. Linehan (2019). "Dignity rights and the environment: Affirming human dignity through environmental justice." *Widener L. Rev.* 25: 153.
- Drumbl, M. A. (1998). "Waging war against the world: the need to move from war crimes to environmental crimes." *Fordham Int'l LJ* 22: 122.
- Ehtasham, L., et al. (2022). "A review of the status of environmental impact assessment in Pakistan." *Integrated Environmental Assessment and Management* 18(2): 314-318.
- Faure, M. (2009). *Environmental crimes*, Edward Elgar Publishing Limited.
- Garland, D. and R. Sparks (2000). "Criminology, social theory and the challenge of our times." *Brit. J. Criminology* 40: 189.
- Halsey, M. (2004). "Against 'green' criminology." *British Journal of Criminology* 44(6): 833-853.
- Hansen, K. M. (1990). "Knowing environmental crimes." *Wm. Mitchell L. Rev.* 16: 987.
- Hussain, A. (2019). "Pakistan on FATF's Grey List: Terrorist Financing Perspective." *Global Regional Review* 4(4): 281-290.
- Hyder, A. A., et al. (2006). "Health and road transport in Pakistan." *Public health* 120(2): 132-141.
- Jeffery, C. R. (1977). *Crime prevention through environmental design*, Sage Publications Beverly Hills, CA.
- Korneev, S., et al. (2021). Liability for environmental crimes in the non bis in idem principle context. *E3S Web of Conferences, EDP Sciences.*



- Mistura, A. (2018). "Is There Space for Environmental Crimes under International Criminal Law: The Impact of the Office of the Prosecutor Policy Paper on Case Selection and Prioritization on the Current Legal Framework." *Colum. J. Envntl. L.* 43: 181.
- Mukhtar, A. (2018). "Money laundering, terror financing and FATF: Implications for Pakistan." *Journal of Current Affairs* 3(1): 27-56.
- Nestle 2005 . Nestle 2005 CLC 424 + PLD 1997 Karachi Page 11
- Nadeem, O. and R. Hameed (2008). "Evaluation of environmental impact assessment system in Pakistan." *Environmental Impact Assessment Review* 28(8): 562-571.
- Prakasa, S. U. W. (2021). "Ecocide Crimes & Omnibus Law: Review of International Law and Its Implications on Indonesia Law." *Dinamika Hak Asasi Manusia* 12(2): 14-20.
- Saeed, R., et al. (2012). "Environmental impact assessment (EIA): an overlooked instrument for sustainable development in Pakistan." *Environmental monitoring and assessment* 184(4): 1909-1919.
- Schmidt, C. W. (2004). "Environmental crimes: profiting at earth's expense." *Environmental Health Perspectives* 112(2): A96-103.
- Smith, T. (2012). "Creating a framework for the prosecution of environmental crimes in international criminal law."
- Companion To International Criminal Law: Critical Perspectives, William Schabas, Yvonne McDermott, Niamh Hayes and Maria Varaki, eds., Ashgate Publisher
- Sohail, M. T., et al. (2014). "An analysis of environmental law in Pakistan-policy and conditions of implementation." *Research Journal of Applied Sciences, Engineering and Technology* 8(5): 644-653.
- South, N. (2014). "Green criminology: Reflections, connections, horizons." *International Journal for Crime, Justice and Social Democracy* 3(2): 5-20.
- Sultan, N., et al. (2021). "The anti-money laundering and counter financing of terrorism policy in Pakistan: Is it truly combating or just a high-level desk work bureaucracy?" *Journal of Public Affairs*: e2731.
- White, R. and D. Heckenberg (2014). *Green criminology: An introduction to the study of environmental harm*, Routledge.